Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Original) A multiple-component branched expandable supportive endoluminal graft comprising:

a plurality of expandable supportive endoluminal components which are deployed individually at a selected location within a body vessel, each said supportive endoluminal graft component being radially compressible for endoluminal insertion and radially expandable for deployment at a desired location within a body vessel;

one of said expandable supportive endoluminal components is a trunk component, said trunk component including a tubular supporting member and a trunk liner positioned along said tubular supporting member, said trunk liner having a generally cylindrical upper body portion, at least two leg portions, and a generally cylindrical lower body portion, each said leg portion defining a leg opening into said upper body portion and another leg opening into said lower body portion;

at least one other of said expandable supportive endoluminal components is a generally cylindrical supportive leg component; and

said generally cylindrical supportive leg component and one of said leg portions of the trunk component, when said leg component and trunk component are deployed within the body vessel, are telescopically positioned with respect to each other.

2. (Original) The supportive endoluminal graft in accordance with claim 1, wherein said generally cylindrical supportive leg component has an end portion which, when deployed, is positioned within one said leg opening of the trunk component.

3. (Original) The supportive endoluminal graft in accordance with claim 1, wherein said plurality of expandable supportive endoluminal components are self-expanding.

4. (Original) The supportive endoluminal graft in accordance with claim 1, wherein said plurality of expandable supportive endoluminal components are deployed by a radially expandable device.

5. (Original) The supportive endoluminal graft in accordance with claim 1, wherein said generally cylindrical supportive component includes a generally cylindrical supporting member and a generally cylindrical liner secured therealong.

6. (Original) The supportive endoluminal graft in accordance with claim 1, wherein said trunk liner is a stretchable wall of essentially inert biocompatible material, said stretchable wall being attached to a portion of the internal surface of the trunk component tubular supporting member, said stretchable wall having a diameter size that expands with said trunk component tubular supporting member.

7. (Original) The supportive endoluminal graft in accordance with claim 5, wherein said liner of the generally cylindrical supportive leg component is a stretchable wall of essentially inert biocompatible material, said stretchable wall being applied onto at least the internal surface of the generally cylindrical tubular supporting member of the leg component.

8. (Original) The supportive endoluminal graft in accordance with claim 1, wherein said at least two leg portions of the trunk liner are partially defined by a longitudinal seam which extends generally between said generally cylindrical upper and lower body portions of the trunk liner.

9. (Original) The supportive endoluminal graft in accordance with claim 8, wherein said leg portions are further defined by portions of the trunk liner which are secured to the tubular supporting member at a location spaced radially from said longitudinal seam.

10. (Original) The supportive endoluminal graft in accordance with claim 1, wherein said leg portions of the trunk liner are longitudinally generally coextensive with a central longitudinal portion of said tubular supporting member of the trunk component.

11. (Original) The supportive endoluminal graft in accordance with claim 10, wherein an outside section of each of said leg portions of the trunk liner is secured to said tubular supporting member, while inside sections of each of said leg portions are secured to each other along an internal seam.

12. (Original) The supportive endoluminal graft in accordance with claim 1, wherein said generally cylindrical supportive leg component, when deployed, is telescopically slidably positioned within one of said leg portions of the trunk component.

13. (Original) The supportive endoluminal graft in accordance with claim 5, wherein said liner of the leg component and said trunk liner are each a stretchable wall made from a porous elastomeric material that provides a structure which allows normal cellular invasion thereinto from the body vessel when implanted therewithin.

14. (Original) The supportive endoluminal graft in accordance with claim 13, wherein said porous elastomeric material of each stretchable wall is an elastomeric polymer.

15. (Original) The supportive endoluminal graft in accordance with claim 13, wherein said porous elastomeric material of said stretchable wall is a polycarbonate urethane.

16. (Original) The supportive endoluminal graft in accordance with claim 13, wherein said porous elastomeric material is coated with a thin layer of silicone rubber.

17. (Original) The supportive endoluminal graft in accordance with claim 5, wherein said trunk liner and said liner of the leg component are each a stretchable wall along the internal surface and the external surface of each tubular supporting component.

18. (Original) The supportive endoluminal graft in accordance with claim 1, wherein an exposed longitudinal end of said tubular supporting member extends longitudinally beyond and is not completely covered by said liner.

19. (Original) The supportive endoluminal graft in accordance with claim 1, wherein said tubular supporting component includes a plurality of wire strands with open areas therebetween.

20. (Original) The supportive endoluminal graft in accordance with claim 19, wherein said wire strands of the tubular supporting component are generally sinusoidally configured

wire that is helically wound into the tubular supporting component, said wire defining therebetween said open areas of the tubular supporting component.

21. (Original) The supportive endoluminal graft in accordance with claim 19, wherein said wire strands of the tubular supporting component are shaped as intersecting elongated lengths integral with each other and defining said openings therebetween to form a mesh-shaped tubular supporting component.

22. (Original) The supportive endoluminal graft in accordance with claim 1, wherein said trunk component includes a projecting securement member.

23. (Original) A multiple-component branching expandable supportive endoluminal graft comprising:

a plurality of expandable supportive endoluminal graft components which are deployed individually at a selected location within a body vessel, each said supportive endoluminal graft component being radially compressible and radially expansible;

one of said expandable supportive endoluminal graft components being a trunk component having a longitudinal axis, an internal liner including a seam disposed generally along the longitudinal axis, and an external surface which is generally cylindrical and spaced outwardly from said internal liner, said trunk component having a plurality of legs defined in part by said seam, said trunk component further having two generally cylindrical body portions which flank said seam and which extend in opposite directions from said legs;

at least one other of said expandable supportive endoluminal graft components being a generally cylindrical supportive leg component;

said trunk component liner being a stretchable wall of essentially inert biocompatible material, said stretchable wall being applied onto an internal surface of a tubular supporting component; and

each said leg is sized and shaped to receive said generally cylindrical supportive leg component.

24. (Original) The branching graft according to claim 23, wherein said trunk component has a network of land areas with open areas defined therebetween.

25. (Original) A method for making a multi-component bifurcating expandable supportive endoluminal graft, comprising the steps of:

providing a generally tubular self-supporting member;

providing a generally cylindrical liner made of flexible material, and flattening said liner so opposing surfaces engage each other;

forming a longitudinal seam within the thus flattened liner in order to secure opposing longitudinal portions of the liner to each other;

inserting the thus seamed liner within the generally tubular self-supporting member;

inflating the seamed liner while within the self-supporting member until radially extending surfaces of the liner engage an inner surface of the tubular self-support member; and

securing said liner radially extending surfaces onto the thus engaged inner surface of the tubular self-supporting member in order to thereby assemble a branched trunk component.

26. (Original) The method of claim 25 further including providing a further expandable supportive endoluminal graft component by providing a generally cylindrical supportive leg component which is sized to be telescopically assembled with one of the leg portions of the branched trunk component.

27. (Original) The method of claim 25, wherein said inflating step includes filling the seamed liner with elutable materials.

28. (Original) The method in accordance with claim 25, wherein said inflating step includes inserting an expandable elongated tool into the seamed liner and expanding same so as to dilate the seamed liner into engagement with the self-supporting member.

29. (Original) The method in accordance with claim 25, wherein said step of forming a longitudinal seam includes applying heat along the longitudinal seam location.

30. (Original) The method in accordance with claim 25, wherein said step of forming a longitudinal seam includes suturing.

31-39 (Cancel)

40. (Previously Presented) A multi-component bifurcating expandable supportive endoluminal graft comprising:

a plurality of expandable supportive endoluminal components adapted to be individually deployed at a selected location within a body vessel, each said supportive endoluminal graft component being radially compressible for endoluminal insertion and radially expandable for deployment at a desired location within a body vessel;

one of said expandable supportive endoluminal components is a trunk component, said trunk component generally surrounding a trunk liner positioned within said trunk component, said trunk liner having a generally cylindrical body portion and two leg portions, each said leg portion defining a leg opening, wherein the generally cylindrical body portion of said liner and portions of said leg portions abut said trunk component and are secured to said trunk component, and portions of said leg portions not abutting said trunk component abut one another and are secured to one another;

at least one other of said expandable supportive endoluminal components is a generally cylindrical supportive leg component; and

said generally cylindrical supportive leg component and one of said leg portions of said liner, when said leg component and trunk component are deployed within the body vessel, are telescopically positioned with respect to each other.

41. (Previously Presented) The supportive endoluminal graft of claim 40, wherein said generally cylindrical supportive leg component has an end portion which, when deployed, is positioned within said leg opening of the trunk liner.

42. (Previously Presented) The supportive endoluminal graft of claim 40 or claim 41, wherein said plurality of expandable supportive endoluminal components are self-expanding.

43. An endoluminal support device comprising:

a radially-expandable, bifurcated support,

the support including:

a first support portion, and

a second support portion including a first lobe and a second lobe, and a longitudinal isthmus between the first lobe and the second lobe,

the first and second lobes having smaller diameters than the first portion; and

a liner coupled to the radially-expandable, bifurcated support,

wherein the endoluminal support device has an uninterrupted cross-section over its entire length.

44. The endoluminal support device of claim 43, wherein the liner is coupled to an interior side of the radially-expandable, bifurcated support.

45. The endoluminal support device of claim 43, wherein the liner is coupled to an exterior side of the radially-expandable, bifurcated support.

46. The endoluminal support device of claim 43, wherein each of the first and second lobes is adapted to receive a branch support.

47. A branching endovascular prosthesis comprising:

a radially expandable support, the support including:

a distal support portion comprising at least one expandable circumferential portion, and

a proximal support portion including a first lobe and a second lobe separated from the first lobe by an isthmus, and

a bifurcated liner coupled to the distal support portion and to the proximal support portion,

wherein the branching endovascular prosthesis has an uninterrupted cross-section over its entire length.

48. The prosthesis of claim 47, wherein the bifurcated liner is coupled to an interior side of the distal support portion and to an interior side of the proximal support portion.

49. The prosthesis of claim 47, wherein the bifurcated liner is coupled to an exterior side of the distal support portion and to an exterior side of the proximal support portion.

50. The prosthesis of claim 47, wherein the prosthesis is self expanding.

51. A branching endovascular prosthesis comprising:

a distal support portion comprising at least one radially expandable portion;

a proximal support portion coupled to the distal support portion,

the proximal support portion including a first radially expandable lobe and a second radially expandable lobe separated from the first lobe by an isthmus; and

a bifurcated liner coupled to the distal support portion and to the proximal support portion,

wherein the branching endovascular prosthesis has an uninterrupted cross-section over its entire length.

52. The prosthesis of claim 51, wherein the bifurcated liner is coupled to an interior side of the distal support portion and to an interior side of the proximal support portion.

53. The prosthesis of claim 51, wherein the bifurcated liner is coupled an exterior side of the distal support portion and to an exterior side of the proximal support portion.

54. A branching endoluminal prosthesis comprising:

a liner and a radially expandable support coupled to said liner;

wherein said liner comprises:

a main body having a proximal portion and a distal portion, said proximal portion including a main lumen, and said distal portion including a first branch having a first lumen extending to a first distal end, and a second branch having a second lumen extending to a second distal end, the first and second branch lumens being in communication with the main lumen and extending through said distal portion to define a bifurcation extending to said first and second distal ends; and

wherein said support comprises:

a distal support portion disposed over said distal portion of said main body, said distal support portion comprising at least one expandable circumferential portion defining a first lobe supporting said first branch, a second lobe supporting said second branch, and opposed indentations to support and separate said first and second branches,

wherein said branching endoluminal prosthesis has an uninterrupted cross-section over its entire length.

55. The branching endoluminal prosthesis of claim 54 wherein said support further comprises an expandable proximal circumferential portion supporting said proximal portion of

said main body.

56. The branching endoluminal prosthesis of claim 54 further comprising an attachment mechanism which couples said distal support to said distal portion of said main body of said liner.

57. The branching endoluminal prosthesis of claim 56 wherein said attachment mechanism attaches said first lobe and a portion of each indentation to the first branch.

58. The branching endoluminal prosthesis of claim 57 wherein said attachment mechanism attaches said second lobe and a portion of each indentation to the second branch.